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The status of *Onychognathus nabouroup benguellensis* (Neumann)

by A. J. F. K. Craig

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The Palewinged Starling *Onychognathus nabouroup* is found locally throughout the dry western areas of southern Africa (Fig. 1). In contrast to other members of the genus, the sexes are alike with glossy black plumage and a bright orange-yellow iris. The outer vanes of the 5 outer primary remiges are chestnut-brown, but the inner vanes are creamy white in all cases.

O. nabouroup was described by Daudin (1800) on the basis of material collected by LeVaillant, who called it "le nabouroup" after the Hottentot name for the bird (LeVaillant 1799). The type locality is Kamiesberg (30°19′S, 18°04′E) in the western Cape Province, South Africa. Reichenow (1903) described a larger race with a darker wing patch, *O. n. intensetincta*, on the basis of material from Port Elizabeth. This is unlikely to have been the collecting locality, since *O. nabouroup* has not been recorded within 100 km of Port Elizabeth subsequently. Sclater (1911) noted that he had been unable to find the specimen on which this race was based, although Reichenow (1903) had stated that it was in the British Museum (Nat. Hist.) (BMNH). Sclater (1930) regarded *O. n. intensetincta* as a synonym of the nominate race, and all subsequent authors have followed suit. Neumann (1903) described *O. n. benguellensis* as similar to the nominate race, but with a pure white wing patch, rather than the buff or cream remiges of birds from other regions. Winterbottom (1961) examined a small sample of specimens and questioned the validity of this race, but it has been retained in the standard checklists (Clancey 1980).

In the course of a comparative study of the Redwinged Starling *O. morio* and the Palewinged Starling, I have examined nearly all of the available museum material of *O. nabouroup*. In addition to checking all specimens for moult, I took standard measurements of wing, tail, tarsus and culmen length, as well as measuring culmen depth and width at the anterior border of the nostril.

The type specimen of *O. nabouroup benguellensis* is in the BMNH at Tring. It is an unsexed, undated flat skin from Benguella in Angola (12°34′S, 13°24′E), with the following measurements (mm): wing 135, tail 104, tarsus 30.3, culmen 26.6. Clancey (1980: 253) notes that racial

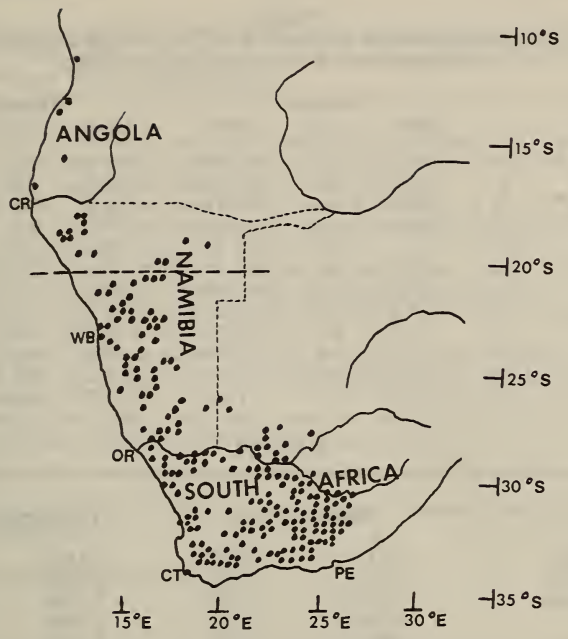

Figure 1. The distribution of the Palewinged Starling *Onychognathus nabouroup*, based both on museum specimens and other records. Dots indicate localities plotted on the quarter-degree square system; the dashed line separates northern and southern birds as described in the text. Points of reference along the coast are the Cunene River (CR), Walvis Bay (WB), the Orange River (OR), Cape Town (CT) and Port Elizabeth (PE).

variation in this species is "reputedly clinal", and does not delimit their ranges on his map of the distribution of the 2 *Onychognathus* species in southern Africa. However, in the text Clancey (p. 254) gives the range of *benguellensis* as the Kaokoveld, northwestern Namibia, and southern and coastal Angola.

Specimens from Angola are few, so I initially divided the material into 2 groups: birds south of 21°S, and birds north of this line (Fig. 1). Their measurements are compared in Table 1. While the mean measurements for southern birds are larger than those for northern birds, there is considerable variation within each group, and an analysis of variance showed that only the wing lengths of female birds differed significantly between the 2 populations. Wing-length is significantly correlated with latitude in both sexes, but tail- and tarsus-length are not (Table 2). The pattern of size variation in this species is not an obvious cline as defined in Campbell & Lack (1985).

Colour of the remiges is a poor differentiating character. Sharpe (1904) remarked that the type specimen of *benguellensis* was indistinguishable from Damaraland birds, and Hoesch & Niethammer (1940) concluded that their specimens from Damaraland, Namibia belonged to the nominate race, since none had pure white remiges as described by Neumann

TABLE 1

Comparative measurements (mm) of 'northern' (n = 7 ♂♂, 11 ♀♀) and 'southern' (n = 50 ♂♂, 42 ♀♀) specimens of *Onychognathus nabouroup*.

		Males			Females		
		Mean	±sd	Range	Mean	±sd	Range
Wing-length	N	141.3	4.5	136–150	134.8	4.1	128–141
	S	145.2	5.7	129–156	139.8	4.8	128–151
Tail-length	N	107.3	2.4	103–110	102.7	5.6	90–111
	S	108.4	5.7	98–121	104.7	4.5	90–112
Tarsus-length	N	33.5	0.5	32.8–37.6	32.0	1.4	29.2–33.8
	S	33.2	1.5	29.8–34.3	32.6	2.0	28.8–37.0
Bill-length	N	28.3	1.3	26.2–29.9	27.3	0.9	25.7–28.8
	S	28.8	1.4	26.0–31.9	27.6	1.7	24.4–29.8
Bill-depth	N	6.7	0.3	6.1–7.1	6.4	0.4	6.0–7.1
	S	6.7	0.4	5.7–7.6	6.6	0.7	5.9–8.6
Bill-width	N	5.8	0.3	5.5–6.2	5.4	0.3	4.8–5.8
	S	5.6	0.3	5.1–6.2	5.7	0.9	4.9–8.5

TABLE 2

Correlations of *Onychognathus nabouroup* measurements with latitude

	Males (n = 66)		Females (n = 57)	
	r	P	r	P
Latitude *v* tail	0.1344	0.283	0.1852	0.161
Latitude *v* wing	0.4571	<0.002	0.5347	<0.002
Latitude *v* tarsus	0.1843	0.142	0.2388	0.076
Tail *v* wing	0.6667	<0.001	0.6080	<0.001
Tarsus *v* wing	0.4681	<0.002	0.5594	<0.002
Tarsus *v* tail	0.3818	<0.002	0.3154	<0.020

(1903) for *benguellensis*. Macdonald (1957) also noted that the colour of the remiges varies greatly in birds from Namibia. However, Sharpe (1904) recognised the race *intensetincta* and used this name for specimens from Deelfontein, Cape Province. I have examined some 20 specimens from this locality, which show considerable variation and do not all agree with Sharpe's criteria for *intensetincta*.

It appears that there is some geographical variation in this species, with the largest birds furthest south. There are no plumage characters which serve to differentiate populations, and distribution is continuous, with considerable local movement in dry periods (pers. obs.). The additional material examined since my original study (Craig 1983) confirms that the timing of moult is similar throughout the range of the species, while the breeding season may vary. Thus I conclude that the race *O. n. benguellensis* does not warrant recognition, and the Palewinged Starling should be treated as a monotypic species.

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Extra rectrices in Olivaceous Cormorants *Phalacrocorax olivaceus*

by Douglas Siegel-Causey

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Abnormal numbers of tail feathers in birds occur infrequently, but the phenomenon has been observed in many orders and families (see Somadikarta 1984, Hanmer 1985, and Saini & Toor in this issue). Unlike in passerines, where abnormalities most often involve a reduction in number, in non-passerines the pattern seems to be of supernumerary rectrices (Hanmer 1985: Table 1). Although extra rectrices are known for many anseriform, charadriiform, and galliform species (Melville 1985), there are few reports of abnormal numbers in the Pelecaniformes; Broekhuizen & Liversidge (1954), for example, found no abnormalities in rectrix number in a sample of c. 3700 Cape Gannets *Morus capensis*. During the course of a family-wide survey of the Phalacrocoracidae, I had the opportunity to examine tail moult in 1272 individuals in 7 species, in both museum collections and field specimens.

All except 14 (1.02%) of the cormorants and shags had the normal number of rectrices, which is 12 except for the Red-legged Shag *Phalacrocorax gaimardi*, which has 14. None of the 14 had a reduced number, and all but one were Olivaceous Cormorants *Phalacrocorax olivaceus* (Table 1), each of which had 2 extra tail feathers; a few appeared